ABSTRACT OF THE DISCLOSURE

A method for measuring the traffic volume of a transport channel in a mobile communication system is disclosed, including receiving a buffer occupancy for each of a set of logical channels mapped to a transport channel, measuring a traffic volume of the transport channel based on the received buffer occupancies, and reporting the measured traffic volume of the transport channel to an upper layer. The measured traffic volume may be reported to the upper layer when the volume is out of a given range or a timer set to a given period has expired. Using this method, a radio resource control layer can perform a dynamic radio bearer reconfiguration using the measurement results received from a medium access control layer of the communication system.